

CLAIMS:

1. A method of sending packet data units for unacknowledged mode services in a handover between base stations in a mobile communications network, wherein the network comprises a network node connected to at least a first base station and a second base station, and user equipment connected to at least one of said first and second base stations, the method comprising:

transmitting packet data units in an acknowledged mode radio link control entity between a transmitting side and a receiving side;

setting a retransmission parameter so that the packet data units are not retransmitted to said first base station when receiving status reports for sent packet data units from said receiving side;

buffering transmitted packet data units in a retransmission buffer;

receiving status reports for the sent packet data units from said receiving side;

purging the packet data units from said retransmission buffer based on said received status reports;

scheduling remaining packet data units in said retransmission buffer for transmission to said second base station; and

transmitting said scheduled remaining packet data units to said second base station.

2. The method according to claim 1, wherein said step of purging comprises:

purging the packet data units that have been either negatively or positively acknowledged by said user terminal from said retransmission buffer.

3. The method according to claim 1, wherein said setting step comprises setting said retransmission parameter that comprises a MaxDAT with an appropriate value.

4. The method according to claim 1, wherein said transmitting step comprises transmitting the packet data in said mobile communication network, which is a high speed downlink packet access network.

5. A system of sending packet data units for unacknowledged mode services in a handover between base stations in a mobile communications network, the system comprising:

- a network node connected at least to a first base station and a second base station;

- user equipment connected to at least one of said first or said second base stations;

- a transmitter configured to transmit packet data units in an acknowledged mode radio link control entity between a transmitting side and a receiving side;

 - a retransmission buffer for buffering transmitted packet data units;

 - setting means for setting a retransmission parameter so that the packet data units are not retransmitted to said first base station when receiving status reports for sent packet data units from said receiving side;

 - a receiver configured to receive the status reports for the sent packet data units from said receiving side; and

 - a management unit configured to purge the packet data units from said retransmission buffer based on said received status reports and to schedule remaining packet data units in said retransmission buffer for transmission to said second base station,

 - wherein said transmitter is configured to transmit said scheduled packet data units to said second base station.

6. The system according to claim 5, wherein said management unit is configured to purge the packet data units that have been either negatively or positively acknowledged by said user terminal from said retransmission buffer.

7. The system according to claim 5, wherein said retransmission parameter comprises a MaxDAT with an appropriate value.

8. The system according to claim 5, wherein said mobile communication network comprises a high speed downlink packet access network.

9. An acknowledged mode transmitting side protocol entity for sending packet data units for unacknowledged mode services in a handover between base stations in a mobile communications network, the entity comprising:

- a transmitter configured to transmit packet data units in an acknowledged mode radio link control entity between a transmitting side and a receiving side;

- a retransmission buffer for buffering transmitted packet data units;

- setting means for setting a retransmission parameter so that the packet data units are not retransmitted to said first base station when receiving status reports for sent packet data units from said receiving side;

- a receiver configured to receive the status reports for the sent packet data units from said receiving side; and

- a management unit configured to purge packet data units from said retransmission buffer based on said received status reports and to schedule remaining packet data units in said retransmission buffer for transmission to said second base station,

- wherein said transmitter is configured to transmit said scheduled packet data units to said second base station.

10. The acknowledged mode transmitting side protocol entity according to claim 9, wherein said management unit is configured to purge the packet data units that have been either negatively or positively acknowledged by said user terminal from said retransmission buffer.

11. The acknowledged mode transmitting side protocol entity according to claim 9, wherein said retransmission parameter comprises a MaxDAT with an appropriate value.

12. The acknowledged mode transmitting side protocol entity according to claim 9, wherein said mobile communication network comprises a high speed downlink packet access network.

13. A system for sending packet data units for unacknowledged mode services in a handover between base stations in a mobile communications network, wherein the network comprises a network node connected to at least a first base station and a second base station, and user equipment connected to at least one of said first and second base stations, the system comprising:

transmitting means for transmitting packet data units in an acknowledged mode radio link control entity between a transmitting side and a receiving side;

setting means for setting a retransmission parameter so that the packet data units are not retransmitted to said first base station when receiving status reports for sent packet data units from said receiving side;

buffering means for buffering transmitted packet data units in a retransmission buffer;

receiving means for receiving status reports for the sent packet data units from said receiving side;

purging means for purging the data units from said retransmission buffer based on said received status reports;

scheduling means for scheduling remaining packet data units and said retransmission buffer for transmission to said second base station; and

transmitting means for transmitting said scheduled remaining packet data units to said second base station.